

Journal of Hydrometeorology

Contents

Vol. 12, No. 6, December 2011

RT			

WATCH: Current Knowledge of the Terrestrial Global Water Cycle	1149–1156
➤ Validation of River Flows in HadGEM1 and HadCM3 with the TRIP River Flow Model	1157-1180
► How Well Do Large-Scale Models Reproduce Regional Hydrological Extremes in Europe?	1181-1204
► Climate Change Effects on Spatiotemporal Patterns of Hydroclimatological Summer Droughts in Norway	1205-1220
Observed Land-Atmosphere Coupling from Satellite Remote Sensing and Reanalysis	1221-1254
Rainfall Retrieval and Nowcasting Based on Multispectral Satellite Images. Part I: Retrieval Study on Daytime 10-Minute Rain Rate XIAO-YONG ZHUGE, FAN YU, AND CHENG-WEI ZHANG	1255–1270
Rainfall Retrieval and Nowcasting Based on Multispectral Satellite Images. Part II: Retrieval Study on Daytime Half-Hour Rain Rate FAN YU, XIAO-YONG ZHUGE, AND CHENG-WEI ZHANG	1271-1285
How Much Can A Priori Hydrologic Model Predictability Help in Optimal Merging of Satellite Precipitation Products?	1287–1298
Development of a Unified Land Model for Prediction of Surface Hydrology and Land-Atmosphere Interactions	1299-1320
A New Characterization of the Land Surface Heterogeneity over Africa for Use in Land Surface Models ARMEL THIBAUT KAPTUÉ TCHUENTÉ, JEAN-LOUIS ROUJEAN, AGNÈS BÉGUÉ, SIETSE O. LOS, AARON A. BOONE, JEAN-FRANÇOIS MAHFOUF,	
Flooding in Western Washington: The Connection to Atmospheric Rivers	1321-1336
Projections of Future Drought in the Continental United States and Mexico MICHAEL WEHNER,	1337-1358
DAVID R. EASTERLING, JAY H. LAWRIMORE, RICHARD R. HEIM JR., RUSSELL S. VOSE, AND BENJAMIN D. SANTER	1359-1377
Understanding the Sensitivity of Different Drought Metrics to the Drivers of Drought under Increased Atmospheric CO ₂	1378-1394
Projected Changes to Streamflow Characteristics over Western Canada as Simulated by the Canadian RCM V. Poitras, L. Sushama, F. Seglenieks, M. N. Khalio, and E. Soulis	1395-1413
Evolving Multisensor Precipitation Estimation Methods: Their Impacts on Flow Prediction Using a Distributed Hydrologic Model David Ketzmiller, Suzanne Van Cooten, Feng Ding,	
	1414-1431
Quantitative Flood Forecasting on Small- and Medium-Sized Basins: A Probabilistic Approach for Operational Purposes FRANCESCO SILVESTRO, NICOLA REBORA, AND LUCA FERRARIS	1432-1446
Quantitative Spatiotemporal Evaluation of Dynamically Downscaled MM5 Precipitation Predictions over the Tampa Bay Region, Florida	1447–1464
Generation of High-Resolution Rain Fields in West Africa: Evaluation of Dynamic Interpolation Methods	
F. CAZENAVE, AND G. PANTHOU	1465-1482

On the Decline of Wintertime Precipitation in the Snowy Mountains of Southeastern Austra	alia ron 1483–1497
Snow Cover and Spring Flood Flow in the Northern Part of Western Siberia (the Poluy, Nadym, Pand Taz Rivers) E. A. Zakharova, A. V. Kouraev, S. Biancamaria, M. V. Kolmako N. M. Mognard, V. A. Zemtsov, S. N. Kirpotin, and B. Dechar	VA,
Influence of Karst Landscape on Planetary Boundary Layer Atmosphere: A Weather Research a Forecasting (WRF) Model-Based Investigation	OD,
The Diurnal Behavior of Evaporative Fraction in the Soil–Vegetation–Atmospheric Boundary La Continuum	
Kalman Filter-Based CMORPH	XIE 1547-1563
Downscaling Ensemble Weather Predictions for Improved Week-2 Hydrologic Forecasting XIAOLI LIU AND PAULIN COULIBATE The Country of th	
Value of a Dual-Polarized Gap-Filling Radar in Support of Southern California Post-Fire Debris-Fl Warnings David P. Jorgensen, Maiana N. Hanshaw, Kevin M. Schmidt, Jayme L. Lab Dennis M. Staley, Jason W. Kean, and Pedro J. Restri	BER,
An Integrated Framework for a Joint Assimilation of Brightness Temperature and Soil Moisture Use the Nondominated Sorting Genetic Algorithm II	ERG,
A New Scheme for Effective Roughness Length and Effective Zero-Plane Displacement in La Surface Models Zhong Zhong, Wei Lu, Shuai Song, and Yaocun Zho	and ANG 1610–1620
Special Collection: Water and Global Change (WATCH)	

concetion: water and Global Change (WATCH)

PAPERS IN PRESS CAN BE VIEWED AS EARLY ONLINE RELEASES AT http://ams.allenpress.com/EOR

Publications of the American Meteorological Society

The JOURNAL OF THE ATMOSPHERIC SCIENCES publishes basic research related to the physics, dynamics, and chemistry of the atmosphere of Earth and other planets, with emphasis on the quantitative and deductive aspects of the subject.

The JOURNAL OF APPLIED METEOROLOGY AND CLIMATOLOGY publishes applied meteorological research related to physical meteorology, weather modification, satellite meteorology, radar meteorology, boundary layer processes, air pollution meteorology (including dispersion and chemical processes), agricultural and forest meteorology, and applied meteorological numerical models. The journal also publishes applied climatology research related to the use of climate information in decision making, impact assessments, seasonal climate forecast applications and verification, climate risk and vulnerability, development of climate monitoring tools, urban and local climates and climate as it relates to the environment and society.

MONTHLY WEATHER REVIEW publishes research results relevant to the analysis and prediction of observed atmospheric circulations and physics, including technique development, data assimilation, model validation, and relevant case studies. This includes papers on numerical and data assimilation techniques that apply to the atmosphere and/or ocean environments as well as socioeconomic analyses of the impacts of weather and weather forecasts. Monthly Weather Review focuses on phenomena having seasonal and subseasonal time scales. Reviews of climatological aspects of high-impact events such as hurricanes, as well as review articles, are occasionally published.

The JOURNAL OF PHYSICAL OCEANOGRAPHY publishes research related to the physics of the ocean and to processes operating at its boundaries. Observational, theoretical, and modeling studies are all welcome, especially those that focus on elucidating specific physical processes. Papers that investigate interactions with other components of the earth system (e.g., ocean-atmosphere, physical-biological, and physical-chemical interactions) as well as studies of other fluid systems (e.g., lakes and laboratory tanks) are also invited, as long as their focus is on understanding the ocean or the ocean's role in the earth system.

The JOURNAL OF ATMOSPHERIC AND OCEANIC TECHNOLOGY publishes research describing instrumentation and methodologies used in atmospheric and oceanic research including remote sensing instruments, measurements, validation, and data analysis techniques from satellites, aircraft, balloons, and surface-based platforms; in situ instruments, measurements, and methods for data acquisition, analysis, and interpretation; and information systems and algorithms.

WEATHER AND FORECASTING publishes research on forecasting and analysis techniques, forecast verification studies, and case studies useful to forecasters. This includes submissions that report on changes to the suite of operational numerical models and statistical postprocessing techniques, demonstrate the transfer of research results to the forecast community, or illustrate the societal use and value of forecasts. Contributions that focus on forecasting and analysis techniques from the very short-range out to seasonal time scales are welcome.

The JOURNAL OF CLIMATE publishes climate research and, therefore, welcomes manuscripts concerned with large-scale variability of the atmosphere, oceans, and land surface, including the cryosphere; past present and projected future changes in the climate system (including those caused by human activities); and climate simulation and prediction. Occasionally the *Journal of Climate* will publish review articles on particularly topical areas. Such reviews must be approved by the Chief Editor prior to submission.

The JOURNAL OF HYDROMETEOROLOGY publishes research related to the modeling, observing, and forecasting of processes related to water and energy fluxes and storage terms, including interactions with the boundary layer and lower atmosphere, and including processes related to precipitation, radiation, and other meteorological inputs.

The BULLETIN OF THE AMERICAN METEOROLOGICAL SOCIETY publishes papers on historical and scientific topics that are of general interest to the AMS membership. It also publishes papers in areas of current scientific controversy and debate, as well as review articles.

EARTH Interactions publishes in the electronic medium original research in the earth system sciences with emphasis on interdis ciplinary studies. Within this framework, the journal particularly encourages submissions that deal with interactions among the lithosphere, hydrosphere, atmosphere, and biosphere in the context of global issues or global change.

WEATHER, CLIMATE, AND SOCIETY, a new quarterly journal, publishes scientific research and analysis on the interactions of weather and climate with society. The journal encompasses economic, policy, institutional, social, behavioral, and international research, including mitigation and adaptation to weather and climate change. Articles may focus on a broad range of topics at the interface of weather and/or climate and society, including the socioeconomic, policy, or technological influences on weather and climate, the socioeconomic or cultural impacts of weather and climate, ethics and equity issues associated with weather, climate, and society, and the historical and cultural contexts of weather, climate, and society.

For information on becoming an AMS member and/or subscribing to the Society's journals, visit the AMS Web site: http://www.ametsoc.org.